AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of smelting copper sulfide concentrate comprising:

oxygen-smelting the copper sulfide concentrate, which includes Fe and S, using a concentrate burner located above a melt to produce a slag and at least one of white metal, nearly white metal matte, and blister copper by adding SiO_2 material and CaO material to the copper sulfide concentrate as flux;

removing most of the Fe in the copper sulfide concentrate into the slag;

removing at least a portion of the S in the copper sulfide concentrate as SO_2; and

obtaining copper from copper sulfide concentrate as at least one of white metal, nearly white matte, and blister copper;

wherein the slag produced by oxygen-smelting the copper sulfide concentrate consists essentially of CaO, SiO_2, Fe oxides, and Cu oxides and has a weight ratio of CaO to (SiO_2 + CaO) of greater than 0.6 to 0.85 and a weight ratio of Fe to (FeO_x +SiO_2 + CaO) of greater than 0.5 to 0.6, and

wherein the slag is maintained at a temperature of up to 1280°C.

2. (Previously Presented) A method of smelting copper sulfide concentrate according to Claim 1, further comprising:

slowly cooling the slag until at least a portion of the slag is solidified;

subjecting the slag to pulverization and flotation to produce recovered copper; and

subjecting the recovered copper to the oxygen smelting process.

3. (Original) A method of smelting copper sulfide concentrate according to Claim 1, wherein the SiO_2 content of the copper sulfide concentrate is at least 1.7% by weight with respect to the Fe to be removed into the slag.

4. (Canceled)

5. (Currently Amended) A method of smelting copper sulfide concentrate, comprising:

oxygen-smelting the copper sulfide concentrate, which includes Fe and S, using a concentrate burner located above a melt;

removing part of the Fe in the copper sulfide concentrate to a first slag and part of the S in the copper sulfide concentrate to SO_2 to produce a matte comprising FeS and Cu_2S;

adding SiO_2 material and CaO material to the matte; and

oxygen-smelting the matte to remove Fe as a second slag and to remove S as SO_2, thereby obtaining blister copper;

wherein the second slag <u>consists essentially of CaO, SiO_2, Fe oxides, and Cu oxides and</u> has a weight ratio of CaO to (SiO_2 + CaO) of greater than 0.6 to 0.85 and a weight ratio of Fe to (FeO_x +SiO_2 + CaO) of greater than 0.5 to 0.6, and

wherein the temperature of the second slag is maintained up to 1280°C.

6. (Previously Presented) A method for smelting copper sulfide concentrate according to Claim 5, further comprising:

slowly cooling at least one of the first and second slags for solidification;

subjecting the at least one of the first and second slags to pulverization and flotation to produce recovered copper; and

subjecting the recovered copper to the matte oxygen smelting process.

7. (Previously Presented) A method of smelting copper sulfide concentrate according to Claim 5, wherein at least one of the first and second slags is maintained in a molten condition and again subjected to the matte oxygen-smelting process.

8. (Previously Presented) A method of smelting copper sulfide concentrate according to Claim 5, wherein at least one of the first and second slags is cooled and solidified and then again subjected to the matte oxygen-smelting process.

9. (Previously Presented) A method of smelting copper sulfide concentrate according to Claim 5, wherein the SiO_2 content in the matte is at least 1.7% by weight with respect to the Fe to be removed in the second slag.

10. (Canceled)

11. (New) A method of smelting copper sulfide concentrate comprising:

oxygen-smelting the copper sulfide concentrate, which includes Fe and S, using a concentrate burner located above a melt to produce a slag and at least one of white metal, nearly white metal matte, and blister copper by adding SiO_2 material and CaO material to the copper sulfide concentrate as flux;

removing most of the Fe in the copper sulfide concentrate into the slag;

removing at least a portion of the S in the copper sulfide concentrate as SO_2; and

obtaining copper from copper sulfide concentrate as at least one of white metal, nearly white matte, and blister copper;

wherein the slag produced by oxygen-smelting the copper sulfide concentrate consists essentially of CaO, SiO_2, Fe oxides, and Cu oxides and has a weight ratio of CaO to (SiO_2 + CaO) of 0.62 to 0.85 and a weight ratio of Fe to (FeO_x +SiO_2 + CaO) of greater than 0.5 to 0.6, and

wherein the slag is maintained at a temperature of up to 1280°C.